

## **502 PORTLAND CEMENT CONCRETE BASE**

### **502.01 DESCRIPTION**

Work consists of constructing a base composed of portland cement concrete, with or without wire fabric reinforcement, on the prepared base course in accordance with the contract documents. Except as herein stated, all requirements specified for 501 are applicable to this specification.

Work also includes PCC for miscellaneous uses, thickened section of alley and drive entrances, bulkheads and various incidental repairs as determined by the Engineer.

### **502.02 CONSTRUCTION REQUIREMENTS**

Construction methods shall conform to 501 with the following exceptions, changes or additions.

#### **(A) TRANSVERSE JOINTS.**

**(1) TRANSVERSE EXPANSION JOINTS.** When the temperature at the time of placing base concrete is 50°F or higher, expansion joints shall be omitted. When the temperature at the time of placing base concrete is lower than 50°F, preformed expansion joint filler 1/2 inch in thickness and meeting the requirements of 807.01 shall be installed in the concrete base at each end of the project and at intervals of approximately 360 feet or at intersections as directed by the Engineer. Joints installed at the end of the project shall be placed at least 10 feet from the end of the existing pavement. The expansion joint filler shall be placed flush with the surface of the finished base and shall extend the full width and depth of the slab. Expansion joints shall be provided with means for load transfer meeting the requirements of 807.03. It will be necessary to round the edges of the joint faces of portland cement concrete base.

**(2) TRANSVERSE CONTRACTION JOINTS.** Weakened plane transverse contraction joints in the concrete base to be covered with asphaltic material may be constructed in accordance with 501.14(C)(3); or after the concrete has been placed and floated, a groove shall be cut in the concrete to a depth of 2-1/2 inches, a fiber strip inserted into this groove, and the concrete finished over the newly formed joint. Joints need not be edged or sealed. These joints shall be placed approximately but not more than 20 feet apart. Load transfer devices will not be required.

**(B) SEALING OF JOINTS.** Unless otherwise directed, sealing of joints in concrete base to be covered with asphaltic materials will not be required. Covering the base with asphaltic material shall constitute sealing.

**(C) FINISHING.** In finishing portland cement concrete base, any deviation of the base surface in excess of 1/4 inch from the straightedge shall be immediately corrected.

### **502.03 MEASURE AND PAYMENT**

Payment for the various items of work listed herein will include all costs for furnishing all materials, labor, tools, equipment and incidentals necessary to complete the work.

**(A) PORTLAND CEMENT CONCRETE BASE (Square Yard Method).** The unit of measure for Portland Cement Concrete Base will be the square yard. The actual number of square yards of the specified depth measured complete in place will be paid for at the contract unit price per square yard, or adjusted unit price per square yard if required under 501.23, which payment will include joints waterproofing, load transfer devices, impervious material, reinforcement if specified and curing.

The width for measurement will be the width from the intersection of the face of the curb or gutter with the surface of the base on one side to the intersection of the face of the curb or gutter with the surface of the base on the other side. Where there is no curb or gutter, the width for measurement will be from outside to outside of the base. The length will be the actual length measured along the center line of the riding surface.

**(B) PORTLAND CEMENT CONCRETE BASE** (Cubic Yard Method). The unit of measure for Portland Cement Concrete Base will be the cubic yard. The actual number of cubic yards complete in place will be paid for at the contract unit price per cubic yard, or adjusted unit price per cubic yard if required under 501.23, which payment includes joints, waterproofing, load transfer devices, impervious material, reinforcement if specified and curing.